Claims

1. Method for transmitting data packets (IP) between network nodes (A, G) of an optical network, wherein the transmission capacity of a data channel (λ1) is first reserved and data packets (IP) aggregated in a data burst (BURST1) are then transmitted,
characterized in that,
after transmission of the data burst (BURST1) the data connection (A - G) via the data channel (λ1) is retained and during this consecutive phase (CPH) further data packets are transmitted between the network nodes (A, G) and
the connection is only terminated when the existing data channel (λ1) is at least partly required for transmitting a data burst (BURST2) of another connection (D - E).

2. Method according to claim 1,
characterized in that
a request (REQ) to reserve transmission capacity / a data channel (λ1) is sent by a reservation-requiring network node (D) via switching devices (S4, S5) of the optical network to an end node (E).

3. Method according to claim 2,
characterized in that
transmission capacity / a data channel (λ1) for a new connection (D - E) is only reserved during the consecutive phase (CPH).

4. Method according to claim 2 or 3,
characterized in that
a disconnect signal (DISC) is transmitted via the switching

devices (S4, S1) present in the connection path (A - G) to the end node (A) that is using the required connection in the consecutive phase (CPH) for transmitting data.

5. Method according to claim 2, characterized in that transmission capacity is reserved according to a two-way reservation OBS principle by means of request and acknowledgment.

6. Method according to claim 5, characterized in that transmission capacity / transmission channels are reserved for bidirectional connections.

7. Method according to claim 6, characterized in that, to reserve transmission capacity for a new connection (D - E), the disconnect signal (DISC) is sent to both network end nodes (A,G) of a connection (A - G) via the switching devices (S4, S5) present in the connection path (A - G).

8. Method according to claim 4 or 7, characterized in that a disconnect signal (DISC) is only sent when an acknowledgment (ACK) is issued by the end node (E) receiving a request (REQ) to reserve transmission capacity.